

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David Bill Art Unit: 2665
Serial No.: 09/105,840 Examiner: Man Phan

Filed: June 26, 1998

Title : DISTRIBUTING PERSONALIZED CONTENT

#### **BOX AF**

Commissioner for Patents Washington, D.C. 20231

#### **BRIEF ON APPEAL**

In response to the Notice of Non-Compliance mailed February 7, 2004, the Appeal Brief has been resubmitted in accordance with the issues raised. The Notice stated that the amendment after the Final Office Action could not be entered. The claims and arguments appearing in this Appeal Brief reflect the claims of record prior to the amendment after the Final Office Action.

# (1) Real Party in Interest

America Online, Inc., the assignee of this application, is the real party in interest.

#### (2) Related Appeals and Interferences

There are no related appeals or interferences.

#### (3) Status of Claims

Claims 1, 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 were rejected under 35 U.S.C. § 112, 2nd paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1-3, 6-9, 12-15 and 18-92 are pending in this application, with claims 1, 24, 27, 36, 54, 72, 79, and 86 being independent.

Claims 1-3, 6-9, 12-15, and 18-71 stand rejected under 35 U.S.C. 103(a) as being obvious over Chaddha (U.S. Patent No. 6,345,293) in view of Reed et al. (U.S. Patent No. 6,041,239).

Claims 72-92 are rejected under 35. U.S.C. 103(a) as being obvious over Chaddha in view of Reed as applied to the claims above and further in view of Logan et al. (U.S. Patent No. 5,721,827).

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#### (4) Status of Amendments

The amendment filed on July 3, 2003 was not entered. The claims appearing in Appendix A reflect the claims of record prior to the amendment after the Final Office Action.

# (5) Summary

The invention involves distributing a digital content element based on a user's predicted interest in that element. Specifically, within a set of pooled content elements, one content element is evaluated to determine whether it should be delivered to a user based on that user's predicted interest therein.

Moreover, the content selection system selectively distributes content by determining a score for a content element. The score is responsive to a predicted interest in the content element by an individual recipient. The score may be compared with a threshold, and a choice deciding whether to distribute the content element to the individual recipient may be made in response. See Page 11, lines 19-21; Page 12, lines 18-20; Page 13, line 8-Page 14, lines 8-10.

The threshold may be adjusted in response to comparing or in response to the individual recipient. The number of individual recipients may be substantially greater than a number of content elements in the pool. Determining the score and comparing the score against a threshold may be repeated for several content elements in the pool. One of the several content elements may be selected. The threshold may be adjusted in response to repeating the comparisons. Page 14, lines 16-19; Page 16, lines 4-9; Page 14, lines 12-Page 15, line 1.

The threshold may be adjusted in response to an individual recipient in response to the repeating the determinations and comparisons. The selection may be responsive to the threshold. Page 16, lines 4-13; Page 14, line 8-Page 15, line 21.

The determinations, comparisons, and choosing may be repeated until a selected condition occurs. The threshold may be adjusted in response to the repeated comparisons. The threshold may be adjusted in response to the individual recipient. The selected condition may be responsive to a number of times the determination is made. The selected condition may include choosing at least one content element in the pool for distribution. Page 15, lines 1-17; Page 16, lines 4-16.

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A new pool of content elements may be selected that differs from the previous pool. The pool may have multiple content elements but less than all of the set of content elements. A new pool may be selected that differs from the previous pool. Selecting the new pool may include replacing the previous pool entirely. Selecting the new pool may include selecting an individual content element for addition to the pool and selecting an individual content element for removal from the pool. The new pool may be selected based on timing information. Page 17, line 1; Page 18, line 8.

The operations described previously may be implemented on a computer program, or a system.

#### (6) Issues

Are claims 1, 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 indefinite for failing to distinctly and particularly point out the subject matter that is claimed?

Is the subject matter of claims 1-3, 6-9, 12-15 and 18-71 obvious over Chaddha '293 in view of Reed '239?

Is the subject matter of claims 72-92 obvious over Chaddha '293 in view of Reed '239 and Logan '827?

### (7) Grouping of Claims

The claims do not stand or fall together. For the reasons presented in the argument section below, the claims are believed to fall into two patentable groups. The first patentable group includes 1-3, 6-9, 12-15, and 18-71. The second patentable group includes claims 72-92.

### (8) Argument

Claims 1, 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 are not indefinite under 35 U.S.C. 112, 2<sup>nd</sup> Paragraph. They distinctly and particularly point out the subject matter that is claimed.

Claims 1, 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 were rejected under 35 U.S.C. § 112, 2nd paragraph, as being indefinite for three reasons. See Final Office Action paragraphs 11-14. First, the Final Office Action states the claims are a statement of desired

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results. Second, the Final Office Action states that a lack of interaction exists between the elements, particularly referencing content, score, pool and predicted interest. Third, the Final Office Action states that it is not clear what the selected threshold process is. Each point is addressed below.

Addressing the first and second points in reverse order, there is an interaction between the elements and the claims are not a statement of desired results. Specifically, claim 1 recites a method to choose whether to distribute a content element. In that claimed method, three steps are recited. A score is determined based on a predicted interest level by an individual in a content element; the determined score is then compared with a threshold; and the comparison is used as a basis for determining whether to distribute the content element to an individual. Clearly, there exists interaction among these elements - the score determined by the first step being used as a basis for comparison in the second step and the comparison made in the second step being used as a basis for the determination in the third step.

As for desired results, this rejection does not appear to be properly grounded in 35 U.S.C. §112, 2<sup>nd</sup> paragraph. The standard for being indefinite is whether the scope of the claim is ascertainable. The breadth of the claim is not to be equated with indefiniteness. See In re Miller, 169 U.S.P.Q. 597, 441 F.2d 689 (C.C.P.A. 1971). See also MPEP 2173.04. Because the scope of the claims is believed to be ascertainable, and because an accusation of desired results alone does not seem to discount the existence of the steps recited by these claims (some of which being discussed above), the reversal of the rejection of the claims is requested.

Claims 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 are similar in structure to claim 1 for the purposes of the rejection in paragraphs 11 and 14, and the reversal of the rejection is similarly requested.

As to the third reason for this rejection, that the "selected threshold" process is not clear, Applicant again submits that this term meets the burden of 112, second paragraph, by conveying an ascertainable scope. Applicant submits that the scope of the term "selected threshold" is ascertainable for the purposes of analyzing the claim and serving the notice function. Additionally, for purposes of addressing comments made in the Final Office Action thoroughly, Applicant notes that the term "selected threshold" is not a process for the purposes of claim 1; rather, the threshold is an object that is compared with a score responsive to a predicted interest

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by an individual recipient. Claims 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 are similar in structure to claim 1. Accordingly, the reversal of the rejection of claims 1, 24, 27, 29, 36, 43, 44, 54, 61, 62, 72, 77, 79, 84, 86, and 91 is requested.

The subject matter of claims 1-3, 6-9, 12-15, and 18-71 would not have been obvious over Chaddha '293 in view of Reed '239.

Claims 1-3, 6-9, 12-15, 18-23, 24-32, 33, 34, 35, 36-53, and 54-71 are rejected as being obvious over Chaddha '293 in view of Reed '239. For the reasons set forth below, the reversal of the rejection of Claims 1-3, 6-9, 12-15, and 18-71 is requested.

In Claim 1, one of several content elements is given a score based on a recipient's predicted interest level in the content element, and then, based on a comparison of the score to a threshold, a decision is made concerning whether to distribute the content element(s). Moreover, claim 1 recites deciding whether to distribute a content element based on a comparison between a threshold and a score that reflects the predicted interest of an individual recipient in the content element.

Chaddha fails to disclose at least this aspect of claim 1, as acknowledged by the Office Action, which turns to Reed for such disclosure. See Final Office Action page 7. "Chaddha does not expressly disclose the step of determining a score for one of a set of content elements in a pool." Applicant submits that Reed is similarly deficient.

Reed scores a geographic region that is not intended or available for distribution, and consequently, Reed fails to decide whether to distribute that which is being scored - the region. More explicitly, Reed assigns scores to regions as a basis for distributing a load among those regions. Thus, in effect, Reed controls a relative allocation for each of several regions based on scores assigned to those regions, without consideration of whether or what scores are determined for items being allocated for the regions. Thus, Reed controls distribution using a process that scores potential destinations for items to be distributed that is different from the claimed process, which claimed process involves deciding whether to distribute items (e.g., content elements) for which scores are determined.

For the purpose of this rejection, the other rejected independent claims recite elements consistent with those of claim 1. Accordingly, Applicant requests the reversal of the rejection of

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independent claims 1, 24, 27, 29, 36, and 54. Similarly, Applicant requests the reversal of the rejection of dependent claims 2-3, 6-9, 12-15, 18-23, 25-26, 28, 30-35, 37-53, and 55-71, which depend therefrom.

The subject matter of claims 72-92 would not have been obvious over Chaddha '293 in view of Reed '239, and further in view of Logan '827.

Claims 72-92 are rejected as obvious over Chaddha '293 in view of Reed '239, and further in view of Logan '827. For at least the reasons set forth below, the reversal of the rejection of claims 72-92 is requested.

The rejected claims recite a personalized scoring system that is used to distribute content to an individual recipient. Specifically, claim 72 recites a method for scoring multiple different content elements for distribution, where the score is responsive to a predicted interest in each of the content elements by an individual recipient.

Neither of Chaddha nor Reed are relied upon for disclosing this limitation. Rather, the Final Office Action turns to Logan. However, in contrast to the claimed limitation mentioned above in which the score <u>relates to</u> the predicted interest of an individual recipient, the cited portion of Logan creates a library of programs that is <u>independent of</u> the intended user. Specifically, Logan indicates that programs may be organized into genres of movies. Logan's "score" does not vary with the identity of the user. Thus, any such categorization in a library in Logan does not score a content element in a manner responsive to a predicted interest in the content element by an individual recipient, as recited by rejected claim 72.

The difference is significant for various reasons, and in various contexts. For instance, the invention of claim 72 can be used to select content that is personalized to a user using a small portion of a larger library. Additionally, the method of claim 72 may be modified in a flexible manner to generate personalized content elements with minimal additional processing required. For example, the score may be recalculated, the threshold may be adjusted, and/or the operations may be repeated until a content element is selected.

For the reasons mentioned above with respect to claims 1-3, 6-9, 12-15, 18-23, 24-32, 33, 34, 35, 36-53, and 54-71, neither Chaddha nor Reed describes determining a score for more than one of several different content elements in a pool of content elements. Accordingly, claim 72

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and claims 73-78, which depend therefrom, should be allowed. Claims 79-85 are system claims related to the method claims 72-78. Claims 86-91 are program claims related to the method claims 72-78. Accordingly, the reversal of the rejection of claims 72-92 is requested.

### No New Issues Are Presented on Appeal

No new issues are presented on appeal. All issues argued in this appeal were previously raised in Appellant's Response to the Final Office Action filed on July 3, 2003. With respect to the rejections made under 35 U.S.C. 103(a), no new issues are presented because the Response to the Final Office Action stated that the rejected claims incorporated all of the features of the independent claims from which they depend, as well as cited other additional features, as described above, which distinguish over the cited references.

#### Conclusion

For the foregoing reasons, the rejections should be reversed. No fee is believed due at this time. However, if any fee is in fact due, please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 3/7/2005

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## Appendix A

1. A method comprising:

determining a score for one of a set of content elements in a pool, said score being responsive to a predicted interest in said one content element by an individual recipient; comparing said score with a selected threshold; and

choosing whether to distribute said one content element to said individual recipient, in response to said comparing.

- 2. A method as in claim 1 further comprising adjusting said selected threshold in response to comparing.
- 3. A method as in claim 1 further comprising adjusting said selected threshold in response to said individual recipient.
- 4. (Cancelled) A method as in claim 1, including steps for adjusting said threshold in response to said steps for comparing; noting a plurality of content elements in said pool, each having an associated score, in response to said steps for adjusting;

selecting one of said plurality in response to said scores.

 (Cancelled) A method as in claim 1, including steps for noting a plurality of content elements in said pool, each having an associated score, in response to said step of comparing;

selecting one of said plurality in response to said scores.

6. A method as in claim 1, wherein a number of said individual recipients is substantially greater than a number of content elements in said pool.

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7. A method as in claim 1 further comprising:

repeating said determining and comparing, for a plurality of content elements in said pool; and

selecting one of said plurality in response to said scores.

- 8. A method as in claim 7 further comprising adjusting said selected threshold in response to said comparing.
- 9. A method as in claim 7 further comprising adjusting said selected threshold in response to said individual recipient.
- 10. (Cancelled) A method as in claim 7, including steps for: adjusting said selected threshold in response to said steps for comparing; noting a plurality of content elements in said pool, each having an associated score, in response to said steps for adjusting;

selecting one of said plurality in response to said scores.

11. (Cancelled) A method as in claim 7, including steps for:
noting a plurality of content elements in said pool, each having an associated score, in response to said step of comparing;

selecting one of said plurality in response to said scores.

- 12. A method as in claim 7 wherein said selecting is responsive to said selected threshold.
- 13. A method as in claim 1 repeating said further comprising repeating said determining, comparing, and choosing, until a selected condition.
- 14. A method as in claim 13 further comprising adjusting said selected threshold in response to said comparing.

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15. A method as in claim 13 further comprising adjusting said selected threshold in response to said individual recipient.

16. (Cancelled) A method as in claim 13, including steps for adjusting said selected threshold in response to said steps for comparing; noting a plurality of content elements in said pool, each having an associated score, in response to said steps for adjusting;

selecting one of said plurality in response to said scores.

17. (Cancelled) A method as in claim 13, including steps for noting a plurality of content elements in said pool, each having an associated score, in response to said step of comparing;

selecting one of said plurality in response to said scores.

- 18. A method as in claim 13 wherein said selected condition is responsive to a number of times said determining is performed.
- 19. A method as in claim 13, wherein said selected condition is that at least one content element in said pool is chosen for distribution.
- 20. A method as in claim 34 further comprising selecting a new pool that differs from said pool.
- 21. A method as in claim 20 wherein said selecting said new pool includes replacing said pool entirely.
- 22. A method as in claim 20, wherein said steps for selecting said new pool include steps for:

selecting an individual content element for addition to said pool; and selecting an individual content element for removal from said pool.

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23. A method as in claim 20 wherein said selecting said new pool are selected based on timing information.

### 24. A system including:

a score for one of a set of content elements in a pool, said score being responsive to a predicted interest by an individual recipient of said one content element to a recipient;

a result of comparing said score with a selected threshold; and

a communication path disposed for coupling said one content element to said individual recipient, in response to said result of comparing.

- 25. A system as in claim 24, including an adjusted threshold, said adjusted threshold being in response to said result of comparing.
- 26. A system as in claim 24, including an adjusted threshold, said adjusted threshold being in response to said individual recipient.

# 27. A system including:

a plurality of scores for content elements in a set of content elements in a pool, said scores being responsive to a predicted interest by an individual recipient of said one content element to a recipient;

a result of comparing said scores with a selected threshold;

an adjusted threshold, said adjusted threshold being in response to said result for comparing;

a communication path disposed for coupling said one content element to said individual recipient, in response to said result of comparing; and

a selected one of said content elements, said selected one being in response to said scores and said adjusted threshold.

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28. A system as in claim 24, wherein a number of said individual recipients is substantially greater than a number of content elements in said pool.

### 29. A system including:

a plurality of scores for content elements in a set of content elements in a pool, said scores being responsive to a predicted interest by an individual recipient of said one content element to a recipient;

a result of comparing said scores with a selected threshold; and an adjusted threshold, said adjusted threshold being in response to said result for comparing; an adjusted threshold, said adjusted threshold being in response to said result for comparing;

a corresponding set of results of comparing said plurality of scores with said adjusted threshold;

a communication path disposed for coupling said one content element to said individual recipient, in response to said result of comparing; and

a selected one of said content elements, said selected one being responsive to said set of results of comparing.

- 30. A system as in claim 35 including a new pool that differs from said pool.
- 31. A system in claim 30 wherein said new pool is in response to replacing said pool entirely.
- 32. A methods as in claim 30, wherein said new pool includes an individual content element added to said pool, and excludes an individual content element removed from said pool.
- 33. A method as in claim 20 wherein content elements in said new pool are selected based on timing information.

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34. A method as in claim 1 further comprising selecting a pool of content elements from said set of content elements, said pool having a plurality of content elements but less than all of said set of content elements.

35. A method as in claim 24 further comprising a pool of content elements selected from said set of content elements, said pool having a plurality of content elements but less than all of said set of content elements.

# 36. A system including:

means for determining a score for one of a set of said content elements in a pool, said score being responsive to a predicted interest in said one content element by an individual recipient;

means for comparing said score with a selected threshold; and means for choosing whether to distribute said one content element to said individual recipient, in response to said comparing.

- 37. A system as in claim 36 further comprising means for adjusting said selected threshold in response to comparing.
- 38. A system as in claim 36 further comprising means for adjusting said selected threshold in response to said individual recipient.
- 39. A system as in claim 36 wherein a number of said individual recipients is substantially greater than a number of content elements in said pool.
  - 40. A system as in claim 36 further comprising:

means for repeating said determining and comparing, for a plurality of content elements in said pool; and

means for selecting one of said plurality in response to said scores.

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41. A system as in claim 40 further comprising means for adjusting said selected threshold in response to said comparing.

42. A system as in claim 40 further comprising means for adjusting said selected threshold in response to said individual recipient.

- 43. A system as in claim 40 wherein said means for selecting selects responsive to said selected threshold.
- 44. A system as in claim 36 further comprising means for repeating said determining, comparing, and choosing, until a selected condition.
- 45. A system as in claim 44 further comprising means for adjusting said selected threshold in response to said comparing.
- 46. A system as in claim 44 further comprising means for adjusting said selected threshold in response to said individual recipient.
- 47. A system as in claim 44 wherein said selected condition is responsive to a number of times said determining is performed.
- 48. A system as in claim 44 wherein said selected condition is that at least one content element in said pool is chosen for distribution.
- 49. A system as in claim 36 further comprising means for selecting a pool of content elements from said set of content elements, said pool having a plurality of content elements but less than all of said set of content elements.
- 50. A system as in claim 49 further comprises means for selecting a new said pool that differs from said pool that differs from said pool.

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51. A system as in claim 50 wherein said means for selecting said new pool includes means for replacing said pool entirely.

- 52. A system as in claim 50 wherein said means for selecting said new pool includes: means for selecting an individual content element for addition to said pool; and means for selecting an individual content element for removal from said pool.
- 53. A system as in claim 50 wherein said means for selecting said new pool include means for selected based on timing information.
  - 54. A computer program comprising:

a scoring code segment structured and arranged to determine a score for one of a set of content elements in a pool, a score being responsive to a predicted interest in said one content element an individual recipient;

a comparing code segment structured and arranged to compare said score with a selected threshold; and

a decision code segment structured and arranged to choose whether to distribute said one content element to said individual recipient, in response to said comparing.

- 55. A computer program as in claim 54 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to comparing.
- 56. A computer program as in claim 54 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to said individual recipient.
- 57. A computer program as in claim 54 wherein a number of said individual recipients is substantially greater than a number of content elements in said pool.
  - 58. A computer program as in claim 54 further comprising:

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a repeating code segment structured and arranged to repeat said determining and comparing, for a plurality of content elements in said pool; and

a selecting code segment structured and arranged to select one of said plurality in response to said scores.

- 59. A computer program as in claim 58 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to said comparing.
- 60. A computer program as in claim 58 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to said individual recipient.
- 61. A computer program as in claim 58 wherein said selecting code segment selects responsive to said selected threshold.
- 62. A computer program as in claim 54 further comprising a repeating code segment structured and arranged to repeat said determining, comparing, and choosing, until a selected condition.
- 63. A computer program as in claim 62 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to said comparing.
- 64. A computer program as in claim 62 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to said individual recipient.
- 65. A computer program as in claim 62 wherein said selected condition selects responsive to a number of times said determining is performed.
- 66. A computer program as in claim 62 wherein said selected condition is that at least one content element in said pool is chosen for distribution.

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67. A computer program as in claim 54 further comprising a selecting code segment structured and arranged to select a pool of content elements from said set of control elements, said pool having a plurality of content elements, but less than all of said set of content elements.

- 68. A computer program as in claim 67 further comprising a second selecting code segment structured and arranged to select a new said pool that differs from said pool.
- 69. A computer program as in claim 68 wherein said second selecting code segment includes a code segment for replacing the said pool entirely.
- 70. A computer program as in claim 67 wherein said second selecting code segment is structured and arranged to:

select an individual content element for addition to said pool; and select an individual content element for removal from said pool.

71. A computer program as in claim 68 wherein said selecting code segment is selected based on timing information.

### 72. A method comprising:

determining a score for more than one of several different content elements in a pool of content elements, said scores being responsive to a predicted interest in said different content elements by an individual recipient;

comparing said scores with a selected threshold;

noting a plurality of content elements in said pool, each having an associated score, in response to said comparing;

selecting one of said plurality in response to said scores; and

choosing whether to distribute at least one of said one content elements to said individual recipient, in response to said comparing.

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73. The method of claim 72 further comprising adjusting said selected threshold in response to said comparing.

- 74. The method of claim 72 further comprising selecting said pool of content elements from a set of content elements, said pool having a plurality of content elements but less than all of said set of content elements.
- 75. A method as in claim 72 further comprising repeating said determining and comparing, for a plurality of content elements in said pool.
- 76. The method of claim 75 further comprising:
  adjusting said selected threshold in response to said comparing; and
  noting a plurality of content elements in said pool, each having an associated score, in
  response to said adjusting.
- 77. A method as in claim 75 further comprising repeating said choosing until a selected condition is satisfied.
- 78. The method of claim 77 further comprising:
  adjusting said selected threshold in response to said comparing; and
  noting a plurality of content elements in said pool, each having an associated score, in
  response to said adjusting.

### 79. A system comprising:

means for determining a score for more than one of several different content elements in a pool of content elements, said scores being responsive to a predicted interest in said different content element by an individual recipient;

means for comparing said scores with a selected threshold;

means for noting a plurality of content elements in said pool, each having an associated score, in response to said comparing;

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means for selecting one of said plurality in response to said scores; and means for choosing whether to distribute at least one of said content elements to said individual recipient, in response to said comparing.

- 80. The system of claim 79 further comprising means for adjusting said selected threshold in response to said comparing.
- 81. The system of claim 79 further comprising means for selecting said pool of content elements from a set of content elements, said pool having a plurality of content elements but less than all of said set of content elements.
- 82. A system as in claim 79 further comprising means for repeating said determining and comparing, for a plurality of content elements in said pool.
- 83. The system of claim 82 further comprising:

  means for adjusting said selected threshold in response to said comparing; and

  means for noting a plurality of content elements in said pool, each having an associated
  score, in response to said adjusting.
- 84. A system as in claim 82 further comprising means for repeating said choosing until a selected condition is satisfied.
- 85. The system of claim 84 further comprising:

  means for adjusting said selected threshold in response to said comparing; and

  means for noting a plurality of content elements in said pool, each having an associated
  score, in response to said adjusting.
- 86. A computer program for choosing whether to distribute one content element, the computer program being stored on a computer readable medium and comprising:

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a scoring code segment structured and arranged to determine a score for more than one of several different content elements in a pool of content elements, said scores being responsive to a predicted interest in said different content elements by an individual recipient;

a comparing code segment structured and arranged to compare said scores with a selected threshold;

a noting code segment structured and arranged to note a plurality of content elements in said pool, each having an associated score, in response to said comparing;

a selecting code segment structured and arranged to selecting one of said plurality in response to said scores; and

a decision code segment structured and arranged to choose whether to distribute at least one of said content elements to said individual recipient, in response to said comparing.

- 87. The computer program of claim 86 further comprising an adjusting code segment structured and arranged to adjust said selected threshold in response to said comparing.
- 88. The computer program of claim 86 further comprising means for selecting said pool of content elements from a set of content elements, said pool having a plurality of content elements but less than all of said set of content elements.
- 89. The computer program as in claim 86 further comprising a repeating code segment structured and arrange to repeat said determining and comparing, for a plurality of content elements in said pool.
  - 90. The computer program of claim 89 further comprising:

an adjusting code segment structured and arranged to adjust said selected threshold in response to said comparing; and

a noting code segment structured and arranged to note a plurality of content elements in said pool, each having an associated score, in response to said adjusting.

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91. The computer program of claim 89 further comprising a repeating code segment structured and arranged to repeat said choosing until a selected condition is satisfied.

### 92. The system of claim 91 further comprising:

an adjusting code segment structured and arranged to adjust said selected threshold in response to said comparing; and

a noting code segment structured and arranged to note a plurality of content elements in said pool, each having an associated score, in response to said adjusting.